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C3*

6. (Amended) A computer program product for calibrating a camera, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:

retrieves a digitized image of a blank textureless surface having a uniform illumination; and

computes intrinsic parameters of the camera based on drop off effects in the digitized image caused by a vignetting effect.

7. (Amended) The computer program product as claimed in claim 6 wherein the drop off effects are also caused by an off-axis pixel projection effect.

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C5*

11. (Amended) A computer system comprising:

a memory system;

an I/O system connected to the memory system;

a storage device connected to the I/O system; and

a calibration routine located in the memory system responsive to a request for calibrating a camera which:

retrieves a digitized image of a blank textureless surface having a uniform illumination; and

computes intrinsic parameters of the camera based on drop off effects in the digitized image caused by a vignetting effect.

12. (Amended) The computer system as claimed in claim 11 wherein the drop off effects are also caused by an off-axis pixel projection effect.

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C7*

16. (Amended) An apparatus for calibrating a camera comprising:

means for digitizing an image of a blank textureless surface having a uniform illumination; and

means for computing intrinsic parameters of the camera based on drop off effects in the digitized image caused by a vignetting effect.